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ABSTRACT

This handbook for nutritionists and dietitians as well as other health professionals (physicians, nurses, and health educators) is a guide to the content and conduct of the Heart Saver Program, a health education program designed to help prevent heart disease by bringing about significant changes in the food habits of the public. The content covers eight areas: (1) overview of heart disease prevention through dietary change, (2) goals and philosophy of the program, (3) influences on eating styles and creating the need for change; (4) content of the Heart Saver Eating Style as contained in six slide-tape units: Get Acquainted With Your Heart; The Eating Style; Making Some Changes; The Main Dish; Milk Products, Fats, and Oils; and Fruits, Vegetables, Grains, and Legumes; (5) methods, materials, activities, and techniques utilized in the program, (6) basic features of a model program for community education in the inner city poverty and minority areas, (7) adaptations of the program in hospital and industrial settings, and (8) methods for evaluating the program participants and the program. (EM)

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The HEART SAVER HANDBOOK

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A MANUAL FOR THOSE WORKING FOR HEART DISEASE PREVENTION THROUGH DIETARY CHANGE

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CHICAGO HEART ASSOCIATION
Nutrition Education Project

HEART SAVER HANDBOOK
Prepared under contract #0G-49
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FOREWORD

Nutritionists and dietitians have been working for decades to improve eating habits of Americans – in schools, extension services, health departments, workplaces, hospitals. From the start – until recently – the emphasis was solely on achieving better intake of essential nutrients (amino acids, vitamins, minerals) to prevent or correct undernutrition, the only form of malnutrition that was recognized.

In the last two decades, a fundamental change has taken place: the concept of malnutrition (literally, from the Latin, bad nutrition) has been extended and broadened to embrace both *under*nutrition and *over*nutrition. For it has been widely recognized that in economically advanced, highly industrialized countries *overeating* is a mass problem. Our own country is a prime example. The problem manifests itself in several ways: All too many people are eating diets excessive in calories for levels of energy expenditure, so that gross obesity is a common phenomenon, even in childhood and youth, and more so as people go beyond early adulthood into middle age. All too many people are regularly consuming large amounts of highly processed, refined, "rich" foods of high caloric density (many calories per mouthful and per portion), and with a poor ratio of nutrients to calories. All too many people are habitually ingesting diets high in saturated fat, cholesterol, salt, sugar.

By now the evidence is overwhelming that these patterns of overnutrition lead not only to high prevalence rates of obesity in our population, but also to tens of millions of people having high levels of serum cholesterol, high levels of blood pressure. And these traits – hypercholesterolemia and hypertension – are two of the three major risk factors for premature atherosclerotic disease, particularly heart attack and coronary death in the prime of life. (The third major risk factor is cigarette smoking.)

For decades now, our country has been experiencing an epidemic of heart attacks, a mass onslaught – about 700,000 deaths every year, about a quarter of them occurring before age 65. Additionally, for every fatal attack, one to two nonfatal ones occur. Coronary heart disease is the number one source of serious sickness and disability in the country. The average apparently healthy adult American man has about one chance in five of developing clinical coronary heart disease before age 65; the average woman, about one chance in fifteen. Tens of millions have much higher risks, way above average, because they are hypercholesterolemic, hypertensive, smokers of cigarettes.

At least a third of first heart attacks are acutely fatal – the great majority of these deaths occurring instantaneously, or in a matter of minutes or a few hours after onset of first symptoms. All too many victims die so rapidly there is no time to bring emergency medical care to them or get them to a hospital coronary care unit. Fully 70 per cent of heart attack fatalities occur outside the hospital. And for those fortunate enough to get to the hospital and recover, prognosis for longevity is significantly impaired. On the average, they are about five times as likely to die in the next five years as those of the same age and sex who have not had a previous heart attack. And in most cases, death is due to another coronary episode, all too often an attack that kills instantaneously.

These harsh facts have led responsible expert groups to a key conclusion concerning public health strategy for the control of the coronary epidemic: to make significant headway, major efforts must be directed toward *primary prevention* – particularly by means of improved life style (eating and smoking habits), to prevent and correct hypercholesterolemia, hypertension and

cigarette smoking. This has been the recommendation of the American Heart Association; the Second National Conference on Cardiovascular Diseases; the Inter-Society Commission on Heart Disease Resources; the Council on Foods and Nutrition of the American Medical Association; the National Academy of Sciences, National Research Council; the White House Conference on Nutrition; the Task Force on Arteriosclerosis of the National Heart and Lung Institute; the President's Panel on Heart Disease.

Obviously, the mounting efforts to prevent heart attacks by improving eating habits have tremendous implications for nutritionists and dietitians, along with all other health professionals. They open up unprecedented exciting opportunities for constructive professional endeavor wherever nutritionists and dietitians work and live.

The **Heart Saver Handbook** is an invaluable tool for nutritionists and dietitians – *also for physicians*, nurses, health educators, all health professionals – in their unfolding efforts to make an optimal contribution to control of the coronary epidemic. In helping to develop this educational program, the National Heart and Lung Institute, the Chicago Heart Association, my colleagues and friends Yolanda Hall and Louise Mojonnier have rendered an outstanding service to the health professions and the American people. By studying this **Handbook** – and above all – by applying it widely, flexibly and skillfully in your work with people, you too will be assisted greatly in your own commitment to "put an oar in the water" as part of the national effort to end the scourge of premature heart attack.

Undoubtedly this is a realistic and practical goal – and in our time. Considered theoretically, there is every reason to believe that collective human ingenuity will bring the coronary epidemic under control, even as in the past it has conquered the mass contagious disease onslaughts (yellow fever, typhoid, cholera, diphtheria), and the mass problems of undernutrition of yesteryear (rickets, pellagra, scurvy). In fact, the hope and conviction that success is possible – and in the years directly ahead, not just in the "great by-and-by" – stems not only from general conviction. It is buttressed by a body of data: first, the evidence from careful research studies that people can change life styles and develop better habits, given able and dedicated leadership; second, the statistics indicating that in the years 1968 to 1973 (the last year of record) death rates from premature coronary heart disease in the United States began to decline, and with this an overall improvement in life expectancy for American adults is being registered, after years of no progress in this key area.

May this **Handbook** be one of many useful tools to accelerate and intensify these favorable trends!

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A Personal Message to Nutritionists and Dietitians

You have an important part in prevention of heart disease. The overwhelming evidence implicating diet in atherosclerosis has resulted in the recommendation of the Inter-Society Commission for Heart Disease Resources that the diet of the general public (particularly of individuals with marked increase in risk of premature atherosclerotic disease) be modified. These recommendations challenge the nutritionist and dietitian—together with colleagues in the health professions—to lead a massive health education effort designed to bring about significant changes in the food habits of the nation. They provide us an opportunity to be in the forefront of preventive nutrition and health education.

The professions of nutrition and dietetics have been presented with a specific task: to play the role of guide, resource and change agent in the attack on the major health problem in the industrialized countries—the epidemic of atherosclerotic coronary heart disease.

We believe this Handbook presents a program which can help lay the foundation for a major advance in the development of optimal food habits for the population of our country. We call on you to join us in this effort and to share your experiences with us.

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INTRODUCTION

Under a research contract from the National Heart and Lung Institute, the Nutrition Education Project (NEP) of the Chicago Heart Association created and tested an education program to guide people in achieving long-term change in eating habits. The objective of the dietary change was to lower serum cholesterol levels and reduce risk of heart attack. The resulting program is known as the Heart Saver Program.

The Heart Saver Program was tested on several groups of hypercholesterolemic men and women from a variety of economic, racial, ethnic and educational backgrounds. The dietary changes were successfully accomplished in a majority of participants and brought about a significant reduction of serum cholesterol levels which were maintained on followup. The core of the Program is the Heart Saver Eating Style, emphasizing a decrease of total fat in the diet, and particularly a decreased intake of saturated fats and cholesterol, with a modest increase in polyunsaturates.

The Program was originally designed for use with hypercholesterolemic patients for primary prevention of coronary heart disease; however its content and slide format is equally adaptable for use with the general public and with patients with coronary disease for the purpose of secondary prevention—the prevention of repeat heart attacks.

The diet prescription approximates the American Heart Association recommendations of 30-35% calories from total fat, less than 10% calories from saturated fat, less than 300 milligrams of dietary cholesterol and a substitution of up to 10% of calories from polyunsaturated fat. Concurrently, the recommended pattern encourages overall good nutrition, adequate intake of all nutrients and caloric intake to control weight.

* * *

The Heart Saver materials contain the basic concepts and facts that people need in order to adopt the new eating style. The materials consist of the following:

- Six slide-tape units describing the dietary recommendations, with audio tapes adapted for use in individual counseling, self-teaching or group teaching.
- The Heart Saver Eating Style booklet with a Food Guide
- A weight control booklet
- Various quizzes and other aids to assess progress and also guide people in making their own commitment to change

These Heart Saver materials are now available for your use.

The way in which the materials are presented is crucial to the program's success. This Handbook is therefore designed as an overall guide to the content and conduct of the Heart Saver Program.

The **Resource Book** supplementing this Handbook contains copies of all forms, quizzes and related materials. Nutrition educators may adapt these to their own needs.

CHAPTER I

HEART DISEASE PREVENTION THROUGH DIETARY CHANGE

As nutrition educators you can be in the forefront of the fight against coronary heart disease (CHD). Our goal is to reduce serum cholesterol levels and achieve weight control through dietary change. The report on the "Primary Prevention of the Atherosclerotic Diseases" published by the Inter-Society Commission for Heart Disease Resources (ICHD) emphasizes two key generalizations on the relationship between nutrition and atherosclerosis:

1. **Production of high serum cholesterol levels and arterial lesions in experimental animals requires a diet with increased cholesterol and fat.**

2. **Human populations consuming diets high in saturated fat and cholesterol have high average serum cholesterol levels and high incidence of coronary heart disease. The reverse is also true.**

The research findings strongly indicate the possibility of *effective primary prevention* of atherosclerotic diseases, particularly premature CHD. The need to identify high risk and coronary prone individuals and to recommend affirmative action programs has been supported by a wide range of professional organizations and scientists. These include the Food and Nutrition Board of the National Academy of Sciences, National Research Council, the Council on Food and Nutrition of the American Medical Association, the American Heart Association, and the Special Advisory Committee to the National Heart and Lung Institute.

The ICHD Report recommended a strategy of primary prevention of premature CHD as long-term national policy for the United States. A major commitment of money and

manpower was proposed to implement a three-point program to reduce the prevalence and incidence of the major risk factors:

1. **Changes in diet to prevent or control hyperlipidemia, obesity, hypertension and diabetes.**

2. **Elimination of cigarette smoking.**

3. **Pharmacologic control of elevated blood pressure.**

Changes in food habits

The Commission recommended the following diet changes for the general public and particularly for individuals with marked increase in risk of premature atherosclerotic diseases:

1. **Adjustment of caloric intake to achieve and maintain optimal weight.**

2. **Reduction of dietary cholesterol to less than 300 milligrams per day from present levels of around 600 milligrams per day.**

3. **Substantial reduction of dietary saturated fats to less than 10 per cent of calories, with moderation in intake of total fat (to less than 35 per cent of calories) and partial substitution of polyunsaturates for saturates (up to 10 per cent of calories).**

The first step for the nutrition educator is to understand the dietary recommendations and to be able to translate them into everyday eating habits for the various sectors of the population. Americans must modify their habits with regard to all sources of fat in the diet – meats, dairy products, baked goods, eggs, table and cooking fats. The Heart Saver Program aims to assist in attaining this change in eating habits recommended by the ICHD.

In the final analysis, the ICHD is recommending an alteration in the basic American eating style: new attitudes toward food, new perceptions of what is glamorous and hospitable in the complex matter of entertaining, new habits of shopping, snacking and eating out.

Such sweeping changes have implications for the food industry, for advertisers, for educators and for consumers. The ICHD therefore recommends a *"comprehensive and sustained public and professional nutrition education program* . . . in which entire communities are actively involved." It calls for a national commitment to change. The Heart Saver Program is a contribution to this effort. The information and the approach suggested are based on experiences in the Nutrition Education Project and our resulting conviction that people *can* change.

CHAPTER 2

THE HEART SAVER APPROACH TO CHANGE: Goals and philosophy of the Program

People eat as they do for profound cultural, psychological and economic reasons, as well as for reasons of availability and convenience. Therefore your task as nutrition educator will be much more than just to impart information: it will be to motivate and support participants as they attempt important changes in their lives. (For this reason, the term *guide* is being used to describe your role – a combination of facilitator, adult educator, and agent of change. The term *participant* is used instead of *patient* to emphasize the preventive aspects of the program.)

The goal of the Heart Saver Program is *behavioral change.* This involves three basic steps for participants:

1. **Becoming aware of current eating patterns and the need for change;**
2. **Mastering the necessary information to make change possible;**
3. **Making the change a permanent part of everyday life.**

Change is part of life

People change all the time. They also resist changing. You can use these dual forces for stability and change as you help each participant identify those eating patterns which already fit into the Heart Saver Eating Style, and those areas where he needs to substitute new and equally satisfying choices. The result will be a new eating style, nutritionally adequate and appropriate for the individual.

It will help to start with yourself. The Heart Saver Eating Style is for *all* people who wish to achieve low cholesterol levels – something which would benefit almost everyone in the United States. As you try out the recommended style, pay close attention to your own feelings. Explore the deeper roots of

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those habits which seem most difficult to change. Note the places where change comes readily. If you find yourself balking at the idea of making certain changes in your own life, try to analyze your resistance. You will then get a sense of what participants will be feeling as you help them in their efforts to change.

Teaching for change

A flexible, informal approach is best in teaching the Heart Saver program. The guide acts as a *facilitator of change* rather than lecturer or formal instructor. You cannot impose change on participants, but you can warmly help and support them as they make their own decisions to change.

The setting for the change program may be either group teaching or individual counseling. Our approaches apply to either mode, but we recommend that a combination of group and individual counseling be used when possible.

Traditional methods (lectures, quizzes) are usually insufficient to produce long-term change because people's eating patterns are deeply entrenched, socially conditioned, and often highly charged emotionally. For example, many people have been taught that two eggs with bacon every morning **is** a healthy breakfast. Changing this habit is difficult, not just because it is an old established routine, but because it is rooted in basic (though erroneous) beliefs about what is good. It even may be a part of the self-image of people who think of themselves as "sensible eaters." The desired change will involve several elements: breaking a fixed routine that dates back to childhood, changing beliefs about the nutritional value of eggs and bacon, and learning to enjoy new food choices.

A free flow of discussion

The teaching situation should involve participants in a free flow of discussion where feelings can be explored, and relevant issues brought up. (For example, ask why the phrases "fried in butter" or "with butter sauce" *feel* so much more attractive to us than "cooked with margarine?") Getting this free flow of response will sometimes require constraint on your part.

Your first and most logical reaction in a given situation may not always be the most effective. For example, a Guide was teaching a group the importance of reducing meat consumption to six to eight ounces per day, emphasizing that this amount provided adequate protein nutrition. The Guide reports:

> **To convey a sense of meat portion size, the nutritionist had brought a round steak and a scale to the group meeting. A participant was requested to trim all the fat and to cut and weigh several recommended portion sizes. The four, five and six ounce cuts were passed around the room. The impact was highly emotional. Comments like "You must be kidding" or "You mean I'm supposed to eat a portion that small?" or "Is that dessert?" were mixed with nervous laughs and coughs.**

> **I was caught off guard and found myself fighting the impulse to defensively assure one and all that they could get used to such portion sizes. Plenty of participants already had. Besides, such a**

meat cut can be extended by use in a casserole, sukiyaki or other main dish. Isn't steak overrated when you get right down to it? Lots of money for fat and cholesterol. And the taste is just an acquired status symbol. These are all rational, true statements. They are good reasons, but when I give them, I am experienced as an authority figure coming down strongly on the side of change. The effect is to stifle the ventilation of important feelings, reassuring the few who have already resolved their conflicts about change, but closing off the greater number who are still struggling.

What is better intervention? That, in a moment. First, why my impulse to intervene so quickly, reassuringly and authoritatively? The answer was my own confusion and anxiety produced by their reaction. The demonstration was supposed to be a benign experiment to promote a sense of portion size. The reaction produced was unexpectedly strong and at first glance, seemingly negative. I had to fight my feelings that now some would never follow our recommendations – that we had lost them. Our plan to produce one effect had produced quite another. *Things were somehow out of control.* The truth was, however, we had produced a host of positive possibilities.

To use these possibilities requires patience, a tolerance for anxiety, and a great deal of flexibility. One approach would have been for the Guide to withdraw quietly from active participation and let the group take over. The desired end is for the participants to *express* and *explore* the strong feelings generated by the demonstration. The Guide can ask short questions encouraging people to expand their thoughts, going from expression of the feelings to discussion of ideas associated with them. Some good questions are: "What does this make you think of?" "Have you ever been served a portion this size?" "Under what circumstances?" "Can you say more about why you have such a strong reaction?" The point is to get individuals to talk about early experiences or deeply held beliefs and attitudes which make limiting meat portions seem so difficult.

All kinds of responses may be forthcoming. An older man might explain that the small portion reminds him of the depression. A housewife might view meat as an important protein source and would feel that she was serving an inadequate amount to meet the nutritional needs of her family. In each case your goal is to get the participant to fully explore the personal antecedents for his feelings.

This open discussion defuses some of the intensity of feeling and paves the way for consideration of change. Success in generating and carrying out a solution in the form of new behavior is often critically tied to a *complete exploration* of the old habit.

Discovery-learning and problem-solving

The two basic processes recommended in teaching are: *discovery-learning* and *problem-solving.* The Guide and other participants encourage an individual to *discover* the various forces which surround a given habit. Once these forces have been recognized, planning a successful change strategy becomes a *problem to be solved:* "How can I find a restaurant with better choices?" "How can I get my family to join me in this change?" "How can I get over the feeling that I have to start every day with a breakfast of bacon and eggs?"

The atmosphere created by you as Guide is most important. Participants must be encouraged to voice feelings, fears and resistances. If they feel their problems will be dealt with harshly or authoritatively they will not speak out. Giving the correct answer to an individual's question may be less important than a sympathetic exploration of his reasons for asking. In a warm and friendly environment people are most likely to reach the ambitious goal of the program: long-term change in eating habits.

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CHAPTER 3

UNDERSTANDING PRESENT EATING PATTERNS: CREATING THE NEED FOR CHANGE

Your first goal is to create a *need* for change. An understanding of how the U.S. eating pattern developed—the social and psychological factors which influence today's eating habits—will help you and the participants to plan a successful change program. When people become aware of the degree to which their eating patterns are influenced by the world around them, they are better able to exercise conscious choice and control of what they eat, to change the environment and their reaction to it.

Each person must make his or her own decision to adopt the Heart Saver Eating Style. A first step is taken when an individual is referred to your program by a physician or joins on his own initiative. He learns that his serum cholesterol level can be reduced by diet change. The Heart Saver booklet and the slide-tape presentations give him the essence of the dietary recommendations and the reasons why reduction of saturated fat and cholesterol is desirable as a preventive health measure. The keeping of a food record will help him become *aware* of what he eats; with this awareness comes the ability to decide what food habits need to be changed.

Sometimes your participants may feel insecure and troubled when they realize that their past choice of foods may have been harmful to themselves and their families. You can reassure them that, until quite recently, the U.S. diet has been accepted by most Americans (and even most nutritionists) without question. However they now have the opportunity to become pioneers with a more healthy diet pattern. As they share their new knowledge with family, friends and community, they can help bring about a major change in our country's eating habits; a change which will help to lower average serum cholesterol levels and reduce one of the major CHD risk factors in our population.

If the educational program is combined with a plan to monitor individual serum cholesterol levels at entry and at periodic intervals thereafter, you can demonstrate the benefit of the new eating style better than with the use of statistics or testimonials. A recommended feature of the program therefore is to arrange for feedback to participants on serum cholesterol change whenever possible.

Influences on our current eating style

The three main factors which influence current eating habits are:

1. Our affluent society which promotes large quantities of food, particularly meat, dairy products, fat and sugar.
2. Family and peer group eating patterns, influenced by ethnic, regional, economic, and status considerations.
3. Personal and symbolic meanings of food.

THE U.S. DIET

Americans have not always eaten as we do today. Economic and technological development and increased per capita income have changed our diet patterns.

In the past, breads, cereals, rice, potatoes and legumes constituted the "staff of life," supplying 60 to 80% of daily calories. With modern agricultural technology and affluence, we have enough cereal available to use a large proportion for livestock feeding, i.e., for conversion of grain to meat and dairy products for human consumption. This is a wasteful practice both in yield of calories and protein: beef production for example requires eight calories from feed to yield one calorie of human food from meat. As the world population increases and the earth's food producing resources are stretched, a reduction in meat consumption and a greater reliance on the primary consumption of cereals will be desirable for economic as well as health reasons.

In our country, meat has become "the staff of life." (Beef consumption doubled between 1945 and 1972.) This has resulted in a diet simultaneously high in total calories, total protein, animal protein, total fat, saturated fat and cholesterol—the typical "American diet." Besides the large consumption of meat in our diet, we eat a larger number of meals and snacks in restaurants and cafeterias without questioning the ingredients. We buy precooked food in cans and frozen packages, again without awareness of the kind of fats or amount of cholesterol they may contain.

The ready availability of commercial baked goods, snacks and franchised food service has led us to substitute convenience and speed for a carefully balanced choice of nutrients. To a great extent the people of the U.S. have lost control of their own diet!

FAMILY AND PEER GROUP INFLUENCE

A commitment to the *U.S. eating style* is developed early in our lives. Our food habits are learned from our families in early childhood and are influenced later by peer groups. Social influence on eating style is especially powerful because it usually operates at an unconscious level.

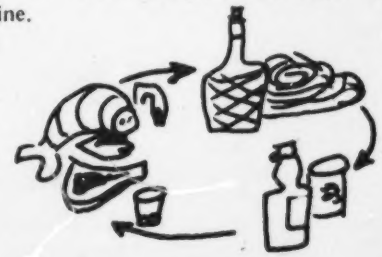
As children, many people were taught to "clean up your plate" or "eat everything that is put before you." People raised this way have strong feelings related to not wasting food, which may persist into adulthood. Once a person is able to see how current attitudes

are being shaped by feelings developed in childhood, he may be able to change. He recognizes the childhood feelings as inappropriate and begins to develop new, more realistic feelings and behaviors. He may decide to put less on his plate, or prepare less for the family. He may select restaurants where portions are modest and where more recommended foods are available; he may choose cafeterias offering more variety, or carry a bag lunch. When unavoidably faced with large quantities or poor choices (as at a banquet), he can ask for substitutes, such as fruit instead of ice cream for dessert, or smaller portions of the items on the menu. Even leaving food on the plate is preferable to eating a large meal high in saturated fat and cholesterol.

A person learns to like foods eaten in childhood, when his eating pattern is defined by the culture, chiefly through his parents. A child not only depends on his parents for food, but also for information about food. Parents help the child to react to foods he is served, "Umm, umm, that is delicious!" Since food habits begin in the home, the family is also a logical place to start changing eating behavior. It is important to regard the Heart Saver Program as a cooperative family project.

Another significant source of eating patterns is the peer group, particularly during adolescence and into adult life. In *The Status Seekers,* Vance Packard cites a compelling example of the influence of peer groups on food habits:

> **As a lad, he had grown up in a poor family of Italian origin. He was raised on blood sausage, pizza, spaghetti, and red wine. After completing high school, he went to Minnesota and began working in logging camps where—anxious to be accepted—he soon learned to prefer beef, beer and beans, and he shunned all Italian food. Later he went to a Detroit industrial plant, and eventually became a promising young executive . . . In his executive role he found himself cultivating the favorite foods and beverages of other young executives: steak, whiskey, and seafood. Ultimately, he gained acceptance in the city's upper classes. Now he began winning admiration from people in his elite social set by going back to his knowledge of Italian food and serving them, with the aid of a manservant, authentic Italian treats such as blood sausage, pizza, spaghetti, and red wine.**



As a Guide, you must be sensitive to the fact that people do not usually recognize that their preferences for the taste of certain foods, as well as other aspects of their eating styles, are *learned.* If you try too hard to convince a participant that he can learn to lose his taste for some of his favorite foods (that also happen to be high in saturated fat), you stand the risk of alienating him. He feels that he knows what he likes; and he is right. But once he understands that there are reasons for his preferences that have little to do with the innate properties of the foods themselves—that there are "external" influences on his "internal" reactions—he is likely to feel more confident in his ability to change his tastes. It is easier to cope with controlling factors after they have been identified. The nutrition educator needs to build on the positive aspects of existing patterns and to stress that while we cannot change the past, we *can* change the way we react to familiar situations today.

PERSONAL MEANINGS OF FOOD

Foods also have a variety of psychological and personal meanings for people—affection, sympathy, sensual pleasure, or punishment. A basic and universal emotion related to food is security. The earliest interactions between mother and infant relate to food, the symbol of mother's love and acceptance. In adulthood food can provide the illusion of security, particularly at times of emotional stress. At such times people will often eat even when not hungry. The act of eating is still associated with the old feelings of care and protection. Aversions to specific foods may also be traced to experiences in early childhood.

As you help the participants explore these psychological meanings of food for themselves, they will be able to decide which feelings and perceptions they need to change

Using the group as a change environment

You can use the group situation in the Heart Saver Program to great advantage. The members will reinforce each other if you allow time for casual conversation, and if you create a warm, informal atmosphere. When people feel free to talk about successes and failures and communicate with each other on a personal level, they begin enjoying one another. Absentees will be genuinely missed, and people will be eager to attend regularly.

To create a sense of need for change, and the stimulus to act on that need, it will be crucial for participants to explore with each other the roots of their own eating patterns and their feelings about them. You can expect some anger to be expressed: at the food industry for its control of foods available, or at doting parents who forced unwanted food on them in childhood. And there may be guilt and embarrassment about using food as an antidote to depression or anxiety. Some may feel fear—especially if they or their spouses have the multiple risk factors associated with premature CHD. When these negative emotions are fully expressed and accepted, they can be helpful in inducing change. Focus on the possibility of change: the fact that many of them *have* altered their food tastes in the course of their lives, the fact that cholesterol level *can* be lowered, and that there are several *simple* concrete changes they can easily and painlessly make *this week*. A few easily accomplished changes at the start, such as reducing egg consumption, can produce a feeling of success and help move the participants on to the more difficult changes.

CHAPTER 4

MASTERING THE HEART SAVER EATING STYLE

Now we come to the essence of our Program—the basic information needed by the participant to make changes in his own eating style. In the previous chapter the emphasis was on motivation for change; this chapter focuses on the *content* of the Heart Saver Eating Style. The Heart Saver style is described in detail in the six slide-tape units and the 40-page Heart Saver Eating Style booklet.

UNIT 1
Get Acquainted with Your Heart

Unit 1 emphasizes that anyone eating the average U.S. diet is likely to have an undesirably high blood cholesterol level; a change to the new eating style can lower cholesterol levels. Participants are most familiar with special weight loss diets which focus on one element—calories. By contrast, the cholesterol-lowering diet requires attention to three items: saturated fat, polyunsaturated fat and dietary cholesterol. (Total calories are still important for those desiring to control weight.) Also in contrast, the usual "going on a diet," implies temporary changes with a restricted food list, while our emphasis is on *permanent longterm change*: a whole new eating pattern with a wide selection of acceptable foods.

A SUMMARY OF THE SLIDE-TAPES

UNIT 1 – GET ACQUAINTED WITH YOUR HEART introduces the participant to the concept of risk factors and the relationship between diet and heart disease; to the effect of various kinds of fats and dietary cholesterol on serum cholesterol.

UNIT 2 – THE EATING STYLE presents an overview of the Heart Saver Eating Style; outlines the main food groups and the recommended choices in each group.

UNIT 3 – MAKING SOME CHANGES explains the factors affecting eating patterns and how habits can be changed.

UNIT 4 – THE MAIN DISH covers selection of main dish choices—meat, fish, poultry, eggs, and meat alternates.

UNIT 5 – MILK PRODUCTS, FATS AND OILS deals with the other important sources of fat in the diet: selection of low-fat dairy products, substitution of polyunsaturated oils and margarines, and avoidance of convenience foods high in saturated fats.

UNIT 6 – FRUITS, VEGETABLES, GRAINS AND LEGUMES discusses the low-fat foods, divided into those containing essential nutrients (fruits, vegetables, grains and legumes) and sugars, alcohol, and other "empty calorie" foods.

Participants learn the difference between saturates and polyunsaturates, and the relation of these to food cholesterol and to blood or serum cholesterol. The basic rules stressed are: (1) reduce intake of foods high in saturated fat; (2) substitute polyunsaturated fat for some of the saturated fat; (3) limit foods high in cholesterol. The application of the rules to food choices takes time to learn, particularly because foods contain varying amounts of saturates, polyunsaturates and cholesterol. Simple generalizations do not always apply. Use of the alphabetical food list—The Heart Saver Food Guide (pp. 32-39) in *The Heart Saver Eating Style* booklet is particularly helpful at this point and should be referred to frequently.

Saturated fat is *generally* a hard fat and an animal fat. It occurs most often in the average diet in meat, eggs, butter, cheeses, and in foods made with butter, eggs and shortening—cakes, doughnuts, french fries. Animal foods contain both saturated fat and cholesterol and contribute to the high serum cholesterol levels in people who eat a lot of these foods.

Polyunsaturated fat is *generally* a soft fat and a vegetable fat, and is most commonly contained in vegetable cooking oils and in soft margarines made from polyunsaturated oils. Polyunsaturated fat tends to *reduce* serum cholesterol levels, and so is encouraged in moderate amounts in the Heart Saver program.

Participants often overlook important exceptions to the rules about saturated and polyunsaturated fats. For example, fish is an animal but its fat is high in polyunsaturates.

Coconut oil, though vegetable, is high in saturates. Participants are frequently misled into thinking all non-dairy creamers and some items like snack crackers are acceptable when the label lists "vegetable oil" as an ingredient, but this is often coconut oil. Specific brand name food lists prove extremely helpful in making specific choices.

Another generally true statement is that all meats are high in both saturated fat and cholesterol. However, liver and shrimp are low in fat but relatively high in cholesterol. The recommendation for liver is "once in a while" and for shrimp "o.k., if portion size is limited."

UNIT 2
The Heart Saver Eating Style

In Unit 2, the five food groups are introduced:

1. Meat, fish, poultry and eggs
2. Dairy products
3. Fats and oils
4. Fruits and vegetables
5. Grains and cereals

Foods have been grouped in this way to combine the general principles of good nutrition with the selection of foods low in saturated fat and cholestrol. Foods containing fat and cholesterol are in the first three groups. Desirable low saturated fat choices within these groups are suggested; polyunsaturated choices are emphasized. Foods in the last two groups are already low in fat and contain no cholesterol; suggestions for generous use of foods from these two groups stress that they are high in nutrients and can be consumed freely, consistent with caloric need.

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AVERAGE DAILY INTAKE

The basic Heart Saver pattern is built around the following:

1. Maximum of six to eight ounces of lean meat, fish or poultry (cooked edible portion).
2. No more than two egg yolks per week.
3. Frequent use of dried peas and beans, nuts and soybean products as meat alternates.
4. Two servings of low fat dairy products such as skim milk, cottage cheese and low fat yogurt.
5. Four servings of fruits and vegetables, including one serving high in vitamin C and a deep green or yellow vegetable every day.
6. Four servings of whole grain or enriched cereals and bread.
7. Two to four tablespoons of polyunsaturated table spreads, salad dressings and cooking oils.
8. Sugars, candies, alcohol, low fat desserts, and other low fat foods to supply variety and flavor may be used in moderation; but total intake must be compatible with calorie needs and weight control goals.

Additional servings from fruits, vegetables, grains and cereals are encouraged when more calories are needed.

For severe hyperlipidemia, saturated fat and cholesterol sources (particularly the meat and egg allowance) may be further reduced and polyunsaturates increased somewhat. Limiting meat to three to four ounces per day and eliminating egg yolks will reduce dietary cholesterol to 150-200 milligrams per day and further reduce saturated fat intake.

UNIT 3
Making Some Changes

This unit focuses on the factors influencing eating behavior. The basic points are:

1. Eating is *learned* and *determined* behavior; shaped by past experience in the contemporary social environment and by family and friends. "We like what we eat, rather than eat what we like." We may have much "choice" but little "control."
2. It takes time and effort to learn to like new foods.
3. To a great extent the homemaker determines what is served in the home and plays a role of key importance in securing change.
4. Frequent "eating out" reduces control of the total dietary intake.

Give ample time for participants to discuss their own experiences and the influences which are now shaping their eating behavior, and use this discussion as a jumping off point for planning changes they feel ready to make.

UNIT 4
The Main Dish

Our characteristically high consumption of meat products (particularly beef and pork) makes the recommendations in Unit 4 an especially lively source of participant reaction. Here are the main points:

1. In selecting the main dish, aim for the *most protein and the least fat* per serving.
2. Limit meat, fish and poultry to 6-8 ounces per day or less; learn to estimate meat portions accurately.
3. Choose fish often; make poultry (chicken, turkey, Cornish hen) a close second choice; meat is the third possibility. Learn to identify the low fat cuts.
4. "Marbling" is an index of fat content; choose meat with the least marbling.
5. Ground beef tends to be a high fat choice. To obtain acceptable ground beef, buy a round steak or very lean chuck; trim the fat before grinding.
6. Trim meat before cooking and again at the table.
7. Emphasize the use of legumes both to extend meat dishes and as a low-cost meat substitute. Suggest menus serving dried peas and beans with rice, pasta or other wheat or corn products for effective protein combinations.
8. Limit eggs to *no more than* two yolks per week; whites are unrestricted.

UNIT 5
Milk Products and Fats and Oils

Unit 5 stresses these facts:

1. The saturated fat and cholesterol in milk and dairy products is in the butterfat. Choose foods low in butterfat for their protein, calcium and vitamins.
2. Ice cream is very high in fat. Ice milk and sherbet can be used occasionally as substitutes.
3. Most cheese is high in fat. *When eaten, the portion should be small, and counted as part of the meat allowance.* Small portions of cheese made with partially skimmed milk may be chosen occasionally.
4. There are five main polyunsaturated oils: safflower, sunflower, corn, cottonseed and soybean. Soybean is generally the most available.
5. Two to four tablespoons of acceptable oil and margarine are recommended to help lower serum cholesterol.
6. Convenience foods, snacks and commercial baked goods frequently contain saturated fat and must be limited.
7. Brand name lists of acceptable products help in making selections, as does label reading.

Cheeses, like meat, often have a great deal of psychological meaning to the individual. Serving them to guests, or developing a taste for the more esoteric (and often the more pungent) varieties can be linked to feelings of status and self-esteem. Cheese can be hard to give up, as can certain beliefs about cheese. Look for alternatives which can be made socially attractive. Instead of a wine and cheese party, suggest serving dips—tuna, low fat yogurt, garbanzo—with fresh vegetables

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and assorted low fat crackers. Bring recipes and snacks to class for sampling. Introduce low fat cheeses made with skim milk and help people locate stores where they may be purchased.

Participants frequently make great gains in lowering their saturated fat and cholesterol intake, but fall short on recommended intakes from polyunsaturates. Ideas for increasing their use include: preparation of homemade salad dressings and use of margarine and oil in cooking and baking, in sauces, on vegetables, and in basting low fat items like chicken and fish.

UNIT 6
Fruits, Vegetables and Grains

Unit 6 considers the role of the low-fat foods emphasizing the following:

1. **Fruits and vegetables high in nutrients and fiber are recommended as substitutes for high fat items; they should be eaten in great variety.**
2. **Legumes are an excellent source of protein as well as carbohydrate and thus a good substitute for meat.**
3. **Sugars, sweets and especially soft drinks, candy, and baked goods are sources of many calories with few nutrients.**
4. **In some cases alcohol may contribute to elevation of blood lipids. At the least, it adds many calories to the diet. Moderation is the key.**

Dried beans, peas, lentils and other legumes are recommended as excellent sources of protein without cholesterol, yet they may carry negative connotations for many participants. They are remembered as "the poor man's diet," whereas meat and cheese are considered staples of "the rich man's diet." Change in this area requires imagination and takes time. It can be encouraged by providing opportunities for trying new recipes. The current interest in natural foods can be beneficial in changing stereotypes, especially with younger participants, or those with teenagers at home. The moderate cost of legumes is another positive factor. A few appropriate questions may catalyze much valuable discussion.

Weight control

Calorie control for those who are attempting to lose weight is emphasized throughout the series. An important feature in the Heart Saver Eating Style is its reduction in *total* fat intake which can greatly assist a weight control program. For persons with hypertension, elevated serum triglycerides, and for those quitting the cigarette habit, counseling on weight control is of prime importance. Participants can be taught that fat is a concentrated source of calories: it contains over twice as many calories as an equal weight of carbohydrate or protein. Supplementary materials are available to aid weight control in the Heart Saver style.

Finally, highlight the relationship of the Heart Saver Eating Style to *over-all good nutrition*—the only key to *permanent* weight control.

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The material covered in each session is summarized in the Heart Saver Eating Style booklet. The food guide at the end of the booklet is particularly useful for checking recommendations on specific foods.

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CHAPTER 5

MAKING CHANGES PERMANENT: Methods, materials, techniques

The test of success in this program is not the final scores on the test, nor the glow of enthusiasm from "new converts." It is the extent to which participants actually make the Heart Saver Eating Style a permanent new way of life. They begin by seeing the *need* for change, then go on to master the basic *facts*. The critical step is putting the principles into *action* in daily life. In any ongoing program these three steps are not independent—the emphasis shifts gradually from one goal to the next.

THE TEACHING METHODS

There are two basic teaching methods: individual counseling and group teaching. They may also be combined. The Heart Saver Program has been used successfully in a variety of settings: a hospital, a diet counseling center, an inner-city community health center, a community college, and an industrial plant. Participants have come from various socio-economic, ethnic and educational backgrounds.

Individual counseling

Individual counseling is the method most frequently used by doctors and dietitians. With this flexible method, the sessions may be tailored to the individual's needs and knowledge. It may be helpful nevertheless to have a basic framework for the individualized program. A suggested outline is shown here.

Plan periodic follow-up visits as needed after the basic sessions, at first monthly and later quarterly as new eating habits are established. (Periodic serum cholesterol and other lipid information is important in evaluating success. A regular program for evaluating progress in weight reduction is also recommended.

A plan for five individual sessions

SESSION 1	Discuss the participant's current food habits and the need for change. Collect information on dietary pattern through use of the Food Pattern Questionnaire and Three-Day Record. Plan initial simple changes.
SESSION 2	Present and discuss slide-tape Units 1 and 2 with particular attention to the relationship between atherosclerosis, blood cholesterol, and coronary heart disease. Emphasize that the Heart Saver program aims to achieve good overall nutrition as well as lower cholesterol levels. Review food record and plan changes.
SESSION 3	Present and discuss slide-tape Units 3 and 4 with a focus on eating as learned and determined behavior; how meat has become the basic component of the main dish; specific recommendations about selecting low fat meat cuts and increasing fish and poultry consumption. Estimate adherence to six-eight ounces total meat consumption. Review usual portions, aim for increase in number of meatless meals and use of fish.
SESSION 4	Present and discuss slide-tape Units 5 and 6, making sure that participant understands the main sources of visible dietary fat, and the value of fruits, vegetables and grains as good nutritional foods low in fat and without cholesterol. Rate use of low fat dairy products.
SESSION 5	Evaluate the extent to which the participant has learned the principles behind the Heart Saver Eating Style and the extent to which he as incorporated these principles into his eating pattern. Deal with specific difficulties and agree upon a strategy for follow-up.

The group method

The group teaching method gives you something that individual counseling cannot—a special context that supports the desired changes. Once you actually begin to meet with your group, you will find that you have a powerful resource to facilitate change.

Successful groups almost always develop a strong identity and cohesiveness. Individual members come to share a common goal: to develop optimal eating patterns. They identify a common enemy—coronary heart disease. As you present the necessary scientific information and help explore strategies for change, a group attitude emerges favoring the Heart Saver Style. This group attitude can serve as an important frame of reference for the specific changes to be made by individual participants.

People working on the same problem will come up with many new ideas. The Guide's suggestions can be improved upon and enlarged by the group. The participants will not only commiserate with each other about the hardships of change but share their own discoveries for making it less hard!

Conducting an open and democratic group is a challenging job that becomes easier with practice. It is important that you not be

viewed as the "authority" or the "leader." If you try always to maintain control over the direction of the group discussion you will find yourself in a dialogue with the participants and there will be little interchange among them. Since you will be the source of a great deal of information, participants will tend to look to you for answers. We are not suggesting that you withhold necessary information, but don't feel compelled to answer every question that arises.

It is particularly important that you avoid being directive when the conversation turns to attitudes and feelings. Help the members to reflect on their situations and discover aspects of themselves that they might not have known. Above all, be aware of your own feelings, specially your *need* to help the participants change. Good intentions become a handicap if you try too hard to get the participants to see things *your way*. Each person has to discover for himself the ways in which he can best incorporate the Heart Saver Eating Style into his own life.

Sometimes a participant will be more open to the views of another participant than those of the Guide. You must expect this to happen and accept it. As Guide you are the symbol of the changes that the participants want to make but find difficult to achieve. Since participants are not always aware of the reasons for their difficulties they are bound to become frustrated, confused, or even somewhat angry. There are natural reactions to change. Sometimes the group may be more helpful than the Guide in handling these feelings in a way that leads to understanding and self confidence.

You will be giving up some control so that the participants can ultimately gain more control over the changes in their lives.

A suggested outline for eight group sessions follows.

A plan for eight group sessions

WEEK 1 Discuss CHD risk factors. (Unit 1)

WEEK 2 Present the basic principles of the Heart Saver Eating Style. (Unit 2)

WEEK 3 Explore the process of change. (Unit 3)

WEEK 4 Using various visual and practical aids, discuss the Main Dish and the recommendations on meat, fish and poultry. (Unit 4)

WEEK 5 Discuss weight control and high blood pressure.

WEEK 6 Discuss Fats and Oils, and Dairy Products. (Unit 5)

WEEK 7 Discuss Fruits, Vegetables, and Grains. (Unit 6)

WEEK 8 Summarize and review, with plans for personal follow-up for long-term change. When appropriate, discuss ways to extend community information and education on heart attack prevention. A model program based on the above outline is discussed in detail in Chapter 6.

Combining group and individual teaching

The combined teaching method is the most flexible. Usually, you will begin with a group and then incorporate individual instruction as it seems appropriate. For example, if one person in the group experiences a problem that is of little relevance for the other members, you can arrange to meet with this individual separately to give help on this problem.

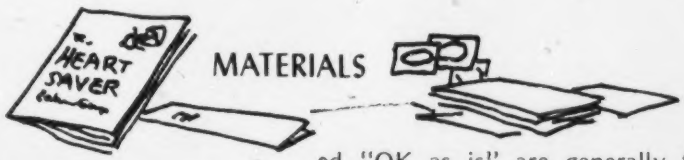
Self-teaching

Heart Saver Eating Style slide-tape units are very effective for use in self-teaching. Used in connection with individual counseling, they reduce the amount of time spent by the Guide in repetitive presentations of the basic material. Special versions of each unit are available for self-teaching with quiz sheets and built-in stops for short quizzes at appropriate moments.

The self-teaching version of the slide-tapes can also play a useful role in group settings. Individual "makeup" appointments can be made for persons missing a group session; the missed audio-visual material can be viewed at the convenience of the participant, supplemented with a brief followup interview with the Guide. Small groups can also view the units, later meeting with the Guide for questions and activities.

Involving the family

As you develop your Heart Saver programs, try to do everything possible to encourage *husbands and wives* to attend together. There are three reasons for this. First, the psychological support and encouragement of a spouse can be very important; second, many of your participants may be middle-aged men (since this is the population most susceptible to CHD) whose wives do most of the food shopping and the cooking; third, many of your participants will have children living at home. By working toward a change in the eating pattern of the entire family, you will be helping the children in that family to learn good food habits early. The participant will also find it easier to make the recommended changes if he sees them as desirable for his entire family.



MATERIALS

The Heart Saver Eating Style booklet

Throughout the course, refer to the *Heart Saver Eating Style* booklet whenever you can in answering questions or presenting information. This will remind participants that they have a convenient source of information at their fingertips all the time, even after the course is finished.

Be sure to make special note of the Food Guide—a crucial reference for everyone, explaining the categories carefully. Foods checked "OK as is" are generally foods low in saturated fat and cholesterol which may be eaten in the quantities recommended (i.e., six to eight ounces as maximum allowance of lean meat, fish and poultry). "OK if modified" indicates fat-containing foods prepared at home from fat-modified ingredients and recipes. Foods in an "Acceptable Products" list are also acceptable because the fat is modified. "Once in a while" foods are those moderately high in saturated fat and/or cholesterol: a maximum of one serving per week from this list is suggested. The "Do Not

Use" column identifies the foods high in saturated fat and cholesterol which should be avoided.

* * *

Various aids have been developed for monitoring behavioral change. These help you assess participants' successes and failures, and provide instruments for diagnosing further needs. Copies of the materials described below will be found in the Heart Saver Resource Book which supplements this Handbook.

The Three-Day Food Record

The record is a small booklet in which the participant records everything he eats or drinks over a three-day period, generally two working days and one week-end day. To keep the food record accurately, the participant must be taught to estimate portion sizes. Plastic food models, measuring cups and spoons are valuable for teaching portion size. A ruler is also useful since dimensions of food items can be converted to volume and weight by the nutritionist and interpreted to the participant.

The record or diary makes the participant more aware of what he eats and when; as he learns to estimate amounts he is better able to follow the new eating style.

The three-day record requires candidness. Sometimes an individual may be reluctant to report large quantities eaten, or a number of unacceptable foods. The same may be true for a person consuming a large amount of alcoholic beverages. The three-day

record must be seen as an *aid*, not a report card. You can help by avoiding any expressions which can be interpreted as disapproval or censure, so that the participant will be encouraged to report his intake accurately.

In a program of eight to ten sessions you might collect two or three food records: one at entry, an optional one in the middle, and one near the end of the program. A three-day record kept at the start of the program shows the participant's entry eating pattern. From this baseline you can see how many and what changes are needed. Used later in the program it monitors the changes actually achieved. (As a practical matter, it is advisable for the Guide to collect and hold the records between sessions so that they will be available for exercises and illustrations.)

A simple exercise early in the program is to have the participant underline all items on his record which contain either fat or cholesterol (or both). He can then begin to distinguish between the saturated fat-containing foods and the polyunsaturated and neutral (or monounsaturated) fat-containing foods.

The Heart Saver Rating Scale

The Heart Saver Rating Scale is a method of assisting the participant to score his daily intake and to note how frequently he is using foods listed as "once in a while" or "do not use" in the Heart Saver Food Guide. Heightened awareness of the fat-containing foods is accomplished. The participant is also encouraged to look at his own diet pattern in terms of the fat-containing food groups and to compare it to the Heart Saver recommendations.

Acceptable products booklet

Booklets listing brand names of acceptable products have frequently been prepared for a state or region by a consumer nutrition education group or a local Heart Association. Group members may help by adding new products they discover. (If such a list is not available for your area, consider preparing one with the help of your local Heart Association.)

ACTIVITIES AND TECHNIQUES

There are many activities that have been found useful in presenting the Heart Saver Eating Style: discussions, demonstrations, field trips and other exercises involving the participants. In deciding what activities you will use on any given occasion, you will want to answer two basic questions: What do I want the participants to learn in this session? What is the best activity I can use to meet this objective?

Often a session may introduce new material via a short talk, reference to material read in the Heart Saver booklet, or by use of a slide-tape unit. Whenever possible, such presentations should be followed by small group activities which require use of the new information in some problem-solving way. Here are some suggested exercises:

1. A lean round steak, knife, cutting board and scale are brought to class. A participant volunteers, and under the Guide's direction weighs the steak. He then trims all possible fat and reweighs. This conveys a sense of the amount of fat contained even in lean cuts. He is then told to estimate the size cut needed to obtain three and six ounce cooked portions (four and eight ounces raw weight—approximately one-quarter of raw weight is lost through "shrinkage" in cooking.) Weighing the cuts stresses meat portion size and the problem of accuracy. Other participants may try their hand, until the steak has been completely divided into appropriate portions.

2. Bring in a lean round steak, meat grinder and all ingredients necessary to prepare a meat loaf. Under the supervision of the rest of the class, one member volunteers to trim the steak, grind it, mix the other ingredients and prepare a meat loaf for baking. It is often very effective to get a male volunteer who has never cooked. A frequent result is a greater interest in the food he eats and how it is prepared. Sampling of completed product can also be planned.

3. A three dimensional risk-factor score board can be constructed or bought commercially. Participants place doughnut-shaped rings around a peg according to the type and amount of risk they have. A vertical board calibrates the relative risk by the final height of the pile of rings. This can be a very effective demonstration of the "risk concept" as well as contributing to general motivation.

4. Snacks can be served to demonstrate the many excellent foods which are a part of the Heart-Saver Style. This is particularly true if a more exotic dish is occasionally served, as it dispels the idea that the eating style is very limited in choices. Participants will often volunteer to prepare food for tasting. This approach enhances the learning experience and reduces the problem of cost and time for preparation for the group leader.

5. Special main course dishes may be brought in, quite apart from plans for half-time snacks. For example, a Guide who gets strong reaction to the small size of the meat portions (in exercise one above) may want to take the meat and prepare a dish like Sukiyaki or pepper steak to show how such a small portion can be made into a bountiful meat dish. The presentation of such "extender dishes" has a positive impact on morale and motivation. After the shock of how small a six ounce piece of round steak appears, participants can often be surprised in the other direction by how many slices can be cut from a similar cut of veal for Veal Scallopini or Veal

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Marsala, or how generous four or five ounces of thinly sliced London Broil looks on a plate.

In one group a determined participant decided to replace commercial pizza with an acceptable product. He experimented until he made a delicious Heart-Saver version of this favorite food and brought in a sample of his efforts for the rest of the group to taste.

Other common recipes can be adjusted to meet the Heart Saver Eating Style. Have participants contribute to a recipe file or cookbook.

Field trips

Field trips are limited only by one's imagination, and the resources and time available to the group. Here are a couple of examples:

1. A class interested in shopping and meat selection might take a trip to the supermarket. Shelf items are examined and discussed. Labels are read. In the meat department different cuts of meat are compared and the marbling seen close-up. A friendly butcher will often take participants to the cutting room to show them where the different cuts come from and how they are prepared.

2. When *eating out* is a major concern, a class can go out to dinner as a group. This exercise involves choosing restaurants and reading menus. It's a nice finishing touch to the supermarket trip above.

3. A variant on eating dinner at a restaurant is a pot-luck supper. Each participant brings a dish of food and a buffet is served. Occasionally, a participant will volunteer his home for such a party. The pot-luck party is a friendly way to end a Heart Saver Program. Brown bag choices are another way to involve participants.

Problem solving exercise

These exercises simulate people's real-life situations and help bridge the gap between theory and practice. You will not find it hard to make up your own. Here are a few examples:

1. *Recognizing fats:* Each participant turns to the sample page in the Three-Day Food Record and circles all entries of fat and cholesterol containing foods. Each individual compares and discusses with others in groups of three or four. The Guide, if needed, serves as expert. There are numerous variations of this activity.

   a. The activity is repeated on the entries of the participant's own recorded eating pattern.

   b. "Poly" and "Sat" entries are marked separately to make the individual aware of categories of fats.

   c. Participants copy off all "poly" fat items and total their daily consumption. They compare the totals to the 2-4 tablespoons recommended per day. The activity may continue by small group discussion, focusing on one individual at a time, of how the day's choices might have been altered to meet the daily recommendation of polyunsaturated fat

2. *Choosing foods:* In groups of three, individuals exchange food records and point out which entries violate Heart Saver recommendations. Each participant, with the help of the two others, brainstorm what other foods he might have chosen.

3. *Reading labels:* A number of labels are duplicated and a copy given to each participant. Broken into triads, each group is assigned several labels and told to discriminate between the acceptable and the unacceptable products. Each triad then reports back to the larger group.

4. *Menu reading:* The same procedure is followed as for label reading. Participants bring in menus and choose items from a menu on the basis of

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three categories: (1) *acceptable as is;* (2) *acceptable if modified,* stating the modification (e.g., the fish sandwich is acceptable if you scrape off the breading); (3) *unacceptable,* too high in saturated fat and/or cholesterol.

5. *Meal planning:* Assigning small groups the task of planning a day's meals is an excellent activity and it has a number of variations. Assignments may be given to plan for a typical and uneventful day, for a holiday picnic, for a busy weekend or for a formal dinner in honor of the boss. For example, a group of nine Heart Savers began their Program during the week of Memorial Day. They had wondered how one could go to a holiday picnic the Heart Saver way. Other problems which emerged were the Sunday brunch and the problem of fixing a formal dinner for important company. The Guide, noting these concerns, prepared the small group activity instructions which appear below. The participants were broken into triads and assigned one task. After 20 minutes they returned to report their results to the larger group.

Sample activity instruction sheets

You are going on a big family picnic for the Fourth of July. You are helping to plan the picnic menu Heart Saver style. What would you plan?

You and your wife are celebrating your birthday with some friends by going out to dinner. You have decided to meet at your home for appetizers and cocktails. What will you plan to serve?

Role-playing

Situations can be contrived that simulate the interactions participants have with other people in their outside lives. For example, imagine that a participant, Al, reports to the group some annoying hazing by friends who discovered his Heart-Saver interests when he suddenly began bringing his lunch to their weekly golf game. Al describes his feelings of embarrassment and his inability to respond as well as he would have liked. He didn't just want a defense, but rather a way to explain his interest in the Heart-Saver Program in such a way that his friends would see its potential importance for them. The group gives Al empathy and support, and begins to make suggestions about what he might have answered. One group member named Jim is particularly articulate and helpful about what Al might have done. As the discussion begins to wane, the Guide might turn to Jim and ask if he would be willing to play the role of Al, while Al and several others play the friends.

Jim hopefully handles the situation well and gives Al and the others a model for the next time the situation occurs. If time permits, the simulation could be repeated with Al playing himself. This kind of role-play is a particularly powerful and instructive technique. It is dependent on the emergence of the appropriate moment, so the Guide should watch for such occasions and use this tactic whenever appropriate.

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Adapting to ethnic patterns

If you have people from various ethnic backgrounds in your group you have an opportunity to test adaptations of the Heart Saver Style to eating patterns that have strong cultural associations and meanings.

Try to accentuate the positive aspects of existing patterns, and help the participants suggest culturally acceptable alternatives for undesirable choices. For example, in the Black community families are already accustomed to a diet including chicken, a healthy choice when cooked appropriately and skin is removed, but the same families also may use high fat items such as salt pork, ham hocks and high-fat hamburgers. You can help them to develop new habits; for example, greens can be cooked without salt pork, using oil for flavoring; or if salt pork is used, the dish can be cooked in advance, refrigerated, and the fat skimmed off.

No one's culture need be slighted: the Latino's fondness for beans and rice, as well as chicken, is to be encouraged as wholly appropriate to a Heart Saver diet. You can build on such good elements of a cultural eating pattern and encourage the adoption of new foods as necessary to complete a new Heart Saver Eating Style—a *synthesis* of new and old foods.

Language can be a communications barrier. In the case of English to Spanish, the need for interpretation is evident; preparation of materials in Spanish is recommended. Tapes can be prepared using Spanish-speaking narrators. Less clearly seen are the differences in language style used by Blacks and whites. Conducting the group sessions conversationally will help, as the group members express concepts in their own words and with graphic examples.

The most effective group leaders are those indigenous to the community and familiar with eating patterns of the participants' ethnic group. If this is not possible, the use of co-leaders recruited from the community and trained as aides has been found to be effective.

Reinforcement and support

The activities listed in this chapter are straightforward attempts to help the participant apply the eating style to his own life. There are other less tangible techniques which aim at reinforcing motivation, giving support during difficulties and helping the participant examine some of the resistances which may be getting in his way. These techniques consist mainly of deciding when and how to intervene in a group discussion, how to draw people out, how to create an atmosphere of trust.

Your participants will vary widely in their degree and kind of motivation. There are often a few "quick changers" who appear to need little more than the concrete information about the Heart Saver Eating Style in order to alter their eating habits. Such people may be very encouraging in the group, provided they do not adopt a self-righteous attitude toward those who struggle more. Because they are unafraid of some change, "quick changers" are able to speak freely of their own feelings and resistances aroused during the change process. This acceptance of the emotional side of their eating pattern is one reason they can change so readily.

Once in a while you will find people who change quickly for the wrong reasons. They

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may use hard-driving will-power to overcome any tendency to resist or rationalize. They tend to avoid and even abort discussions of "feelings" about foods which are seen as irrelevant and a waste of time. These individuals may thwart productive and important discussions which others may need, or adopt a condescending attitude: "I made these changes easily; why can't you?" Understandably, such behavior is not only unhelpful; it is destructive. The Guide must limit such interactions by diplomacy and tact so as to preserve the open and trusting environment which is so essential for change.

The atmosphere

To promote an atmosphere of trust and openness, some basic commitments are needed from the beginning. Ask the group to agree to the following:

1. Attendance at all sessions.
2. Prompt arrival. (The goal is to start and end on time. For the sake of cohesiveness and unity, it is better to ask each person to arrive on time rather than set a norm that you will start on time and latecomers can straggle in.)
3. When absence or lateness is unavoidable, the participant should call the Guide prior to the session.
4. Make-ups for absence should be encouraged, if not mandatory.
5. Any subject matter is appropriate as long as it deals with the Heart Saver Eating Style in the *here and now.* All discussion is viewed as important as long as it deals with the participant's current needs in relation to the eating style. This may be a problem in times of stress. For example, in a discussion of heart disease and death, a participant might begin a lengthy description of a distant acquaintance who died of a heart attack. He does this to avoid his own more important feelings of fright and helplessness at the thought of having a heart attack himself. Bringing discussion back to the *here* and *now* is the responsibility of the Guide.

Here are some general guidelines for yourself in handling the group:

1. Don't play the expert unless you must. When possible, get others to answer.
2. Never give a long, technical answer when a short one will do.
3. Always probe for what is behind the question. You might request that the person expand on a first query. Or before giving a short answer, say "Why do you ask?"
4. When you do answer, be personal. Don't distance yourself by coming across like a teacher or parent. Speak for yourself as a group member.

Resistance to change

Since people are human, you are very likely to get some questions or statements that reflect at least some basic doubts, and often a more pervasive resistance to change. In the former cases you can simply avail yourself of the knowledge of other participants or refer to primary source material. Resistances require a more head-on approach. They are frequently instances of rationalization, or selective perception. For instance, Heart Savers often talk about *occasional* food splurges which may turn out to mean once or twice a week. "It won't hurt just this once" is also the common excuse of drinkers or cigarette smokers as they fall off the wagon.

Sometimes an individual chooses certain specific areas of compliance with the Heart Saver Style, while ignoring others. For example, a participant is surprised to find that his blood cholesterol has remained the same after five weeks in the program. He is

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shocked, as he feels he has changed immensely by giving up eggs, switching to margarine and eating more fish. But examination of his food record shows he still eats twice the recommended portions of meat per day, large amounts of cheese, and frequently has his fish cooked in a cream or butter sauce. This participant has evaded difficulty by focusing on just a few aspects of the eating style to the exclusion of many others. He is convinced he has really changed and cannot understand why his cholesterol has not been lowered. The Guide must be firm but tactful, lest the person become totally discouraged.

We suggest that the idea of resistances be introduced early in the program so that they will be recognized when they arise. This discussion could follow slide-tape Unit 3 on change.

Here are some suggested ways of handling resistance:

ON THE MEANING OF RISK

P1: "My Uncle Jake ate meat three times a day. He had high blood pressure and smoked like a chimney. He died at 90 of pneumonia."

P2: "My neighbor was the cleanest liver in town. Never smoked or drank. He was easy going and ate very modestly. At 40 he died of a heart attack. So why make all these changes?"

G1: "Changing your risk means lowering it, not eliminating it. Imagine that in the highest risk group seven out of ten men will have heart disease, and in the lowest risk only one in ten. There will always be some men who do all the wrong things but survive, like your Uncle Jake. And there will always be that one man like your neighbor who seems to do everything right but has heart disease. It's a question of statistical chance, like Russian roulette. If you had to put a ten chamber gun to your head and pull the trigger once, would you rather play with one chamber filled with a bullet, or with seven?"

G2: "It's like crossing Main Street at rush hour with a blindfold. Even with a blindfold some men might make it to the other side. And if you cross without a blindfold there is a small chance you might be hit. Crossing without the blindfold is like going through life at low risk. How are you going to cross that street?"

P: "We've all got to die of something, someday. Why not heart disease? It's quicker and much less painful than something like cancer. I remember how my mother lingered in pain . . . "

G: "It's true that if you've got to die at 80, heart attack is as good a way as any. But we're not talking about dying at 80 of heart attack rather than cancer. We're talking about the risk of dying at 45 or 50 of heart disease when you might have been able to live to 80. We're also talking about the long, costly disabling illness which many heart attack victims suffer."

ON DEATH: DISTANCING RESISTANCES

The reality of death by heart attack will weigh heavily on many participants. A number of individuals may be with you because they know they have higher than average risk. Encourage people to talk openly about their fears without being overly maudlin or frightening. At times some real life event will bring the topic up for discussion, including the possibility that during the time the Program is being conducted a participant may have a coronary.

A Guide was notified by a participant's wife that her husband had had a heart attack

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and was in intensive care. It was the Guide's job to announce this to the other participants at the next session. The others immediately began to find reasons why this person may have had a heart attack, and by implication, why they would not:

P1: "Oh yes, Sid was terribly overweight."

P2: "I drove home with Sid two weeks ago. You could just tell that he was one of those anxious, nervous kind of guys who can't relax at all."

When films which dramatize death through heart disease are shown, participants often react by a short emotional silence followed by discussions which distance their fears. After one such film a participant, who was a school teacher, began a long monologue on how the students in his school get anti-cigarette training, but continue to smoke.

These are "flight from fright" behaviors which evade the reality of death and heart disease. They are attempts to reassure oneself that "it can't or won't happen to me." Like any resistance, they are fully human responses and should not be treated as somehow "bad" or "weak." Your role as Guide is to gently make people aware of these tendencies and bring the discussion back to the issue.

G1: "Yes, Sid was heavy and perhaps tense. But so are many of us. Aren't we trying to find reasons to explain how it happened to him so as to reassure ourselves and deny that it might have been us? Jim, you've been told you're high risk. How did you feel when you were told? And how do you feel now, given what has happened to Sid?"

G2: "Al, why talk about those students, who, after all, aren't in this Program? Don't we have more than enough examples right here of people getting life-saving information about the need to change certain eating habits and yet having been unable to do so? Why not talk about ourselves?"

THE COST OF THE HEART SAVER STYLE

P: "I find this Heart Saver Style more expensive. For example, the preferred margarines are 10¢ more a pound and the price of veal is sky-high."

G: "It's true that some items are a bit more expensive, especially when first changing over. But you can also save money. If you follow portion size recommendations you can reduce your meat budget considerably. Many cheaper grades of meat have less fat than the expensive cuts. (This is particularly effective if these observations emerge from other participants rather than from you.) Watch for sales and use meat extenders, low-cost soups and casseroles frequently.

THE PROBLEM-SOLVING APPROACH

P: "You mean you want me to abide by these rules every day and every meal? I can't do it. I eat lunch out five days a week. It's often part of my business."

G: "Changing to the Heart Saver Eating Style is sometimes difficult, but once established it becomes a habit, almost second nature. This program lasts only eight weeks. We hope you'll look on this as an eight week experiment. That's eight weeks, times seven days, times three meals (and however many snacks) or at least 168 problem-challenges to be met. For each one, ask the question: "How can I choose or prepare a meal that fits the Heart Saver recommendations?" Eating out is more difficult than eating at home, but it can be done. It's an eight week experiment and challenge. At the end of that time, we can see how your blood cholesterol has changed. You will be the one to decide how to maintain these long term changes and how important they are to you."

LEARNING TO LIKE FISH

P1: "I can't stand fish. I don't think you'll *ever* get me to like it."

P2: "I always feel like fish is some kind of penance. I used to have it every Friday and I never have really developed a liking for it."

G: There is no one response that will get someone to experiment with fish, much less guarantee they will like it. One Guide's experience is particularly instructive. In her group was a man who was convinced he didn't like fish. The Guide made the usual observations and encouraged the man to give fish a try. He still held out on experimenting. In the middle of the program the man and his wife were invited for dinner by another couple in the group. Bouillabaise was served, and to his surprise, the first participant liked it. The report back to the group by both couples at the next meeting was a perfect example of the objectives of an experimenting *discovery-learning* approach. Bringing in samples of fish dishes prepared by participants is also effective, as is the exchange of recipes.

BRINGING IN CONFLICTING EVIDENCE

P1: "Here is an article I read in the paper which claims a low cholesterol cow has been developed."

P2: "I read in a book that lecithin in egg counteracts cholesterol."

P3: "Vitamin E can counteract heart disease."

G: The participant should be encouraged to bring in relevant articles about heart disease, nutrition, etc. Often these may support the Heart Saver point of view; occasionally they will seem to refute it. The Guide should not feel threatened by such articles but view them in a detached way. You may want to refer to the importance of controlled studies, meaningful sample size and replication before results can be given the status of scientific facts. The main thing is to avoid sounding defensive or like a proselytizer. If an article does raise issues you have no answer for, admit it and delay responding. Get an opinion from someone familiar with the area in question. Remember to report back at the next program meeting. It is important to be open to such inquiry as it fosters interest and exploration by the participants. Bringing in outside articles can be used as a subtle resistance. One Guide had a participant with a Ph.D.

who each week bought in five or six high level articles of Heart Saver interest. But his own eating pattern remained the same. The Guide suspected this highly intellectual man used his scholarly pursuit of Heart Saver articles as a substitute activity for actually changing his eating pattern.

PROBLEMS WITHOUT EASY ANSWERS

P1: "I haven't changed because my wife does all the cooking and shopping and she's not here. She's read the booklet but we just don't have the kind of relationship where I can sit down and tell her all this stuff."

P2: "We go to my grandmother's for dinner twice a month. She makes wonderful Old World sausage which she knows I love. It would break her heart if I told her I'd found out it was bad for my health after all these years. She just wouldn't understand. Besides, twice a month is not like every day.

P3: "I can't stand the taste of those "Poly" oils. I'm just too used to olive oil for cooking. That's a neutral one anyway."

G: There are no easy answers for problems like these. You may ultimately have to reach some kind of compromise—an individual counseling

appointment for the wife, a day without meat to make up for sausage, a trial period of mixing half "Poly" oil with half olive as an experiment. Your stance must be one of principled reasonableness. You are clear about what should occur, but you recognize the participant's right to opt for less. You are always on the alert to suggest compromises or half-steps as an interim measure for reaching a goal which at present is experienced as too demanding by the individual. Ideal outcomes are not always possible.

It is this kind of unplanned give and take which characterizes the Heart Saver approach and distinguishes it from more traditional education. In the beginning you may not feel comfortable or satisfied with many of your interventions, but you will find special rewards from this approach which are unavailable in more traditional settings.

Terminating and maintenance

Termination should be introduced and discussed like any other part of the program. Participants may want to ventilate their fears about slipping back, as well as their plans to counter the effects of the old environment. Group members should consider the special problems of continuing their new eating style without the helpful support of a group. From the beginning the Guilde must be alert to potential supports that a participant may develop in his outside life that will continue to reinforce Heart Saver behavior once the program is over. And similarly, the Guide should encourage participants to change outside activities that are likely to cause directly conflicting pressures.

Helpful approaches might be:

1. The recruitment of active support from participant's immediate family, especially the spouse; also friends and co-workers.

2. Encouraging participants to act as Guide to others when the program ends. One participant, a widower, got along very well with his daughter and son-in-law. His commitment to the Heart Saver Style was reinforced when he introduced and supported them in *their* efforts at change.

3. Supportive friendships within the group may continue after termination.

4. A permanent shift in undesirable outside situations, such as a change in restaurant patronage, or playing bridge (or going to the movies) rather than dining out with friends who eat high-fat meals.

5. Planning periodic cholesterol checks to reinforce adherence.

When possible, have a last meeting some weeks after the basic program. The interval can be used as a solo trial period. Individuals can set interim goals for change and ways of countering the environment, and report back on these at the final meeting. Participants are urged to continue to use the discovery-learning and problem-solving approach after classes are over.

Participants should not just fade away at the program's end. Whether periodic activities (such as reunions) are possible depends largely on the Guide and the goals of the program. Follow-ups can include reunion parties, periodic demonstrations or talks, an area-wide newsletter, the viewing of films, topical workshops, mini-refresher courses, mailings of various kinds (menu items, newspaper articles, research news, new products), and so on. The population for such activities could be individual groups or larger audiences from a number of groups or classes that have gone through the program. When planning your program, consider building in periodic reinforcement to keep participants maintain the new eating pattern.

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CHAPTER 6

A MODEL PROGRAM FOR COMMUNITY EDUCATION IN THE INNER CITY POVERTY AND MINORITY AREAS

Now that you have a grasp of the basic approach of the Heart Saver Program, and the essentials of the Heart Saver Eating Style, you are ready to put these elements together into a course for a particular group of people you wish to reach.

In this chapter we have chosen to describe a "model course" based on a series of courses taught for inner city communities with emphasis on black and Latino community leadership programs. A special feature of this program is the use of community aides

SESSION:	1	2	3	4
MAJOR TOPICS	Risk of CHD Goal of Heart Saver Program	Heart Saver Eating Style	Change Process	Main Dish
OPTIONAL ADDITIONAL TOPICS			Psychological factors in change	
SLIDE-TAPE UNITS, HS MATERIALS AND AIDS	UNIT 1 Course schedule Nutrition information quiz (pre-test) HSES booklet 3 Day Food Record	UNIT 2 Draw blood Weigh Take blood pressure Smoking questionnaire Heart Saver Rating Scale	UNIT 3 Feedback sheet on plans for change	UNIT 4 Food demonstrations (trim, grind meat, egg substitute) (Visit butcher nearby) Quiz on portion sizes (food models)
ACTIVITIES TO FURTHER GROUP COHESION	Personal introductions Why members are here Discuss own eating patterns	Review food records in groups	Discuss change process in personal experience	Tasting party (including fat-modified recipes) Report on changes made already
RESOURCE PERSONS		Medical backup for procedures and referrals	Psychologist on change process	

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and a plan for community follow-up programs as a result of the initial course. In the supplementary Resource Book you will find a comprehensive description of a course developed for groups of 10-20 persons in an eight-week program in a community college setting. This model can be modified or expanded and adapted to many other settings: public health centers, volunteer community agencies, industrial plants, even junior and senior high schools.

The main features of the basic program are charted below.

Read the chart across—for the *sequence* of activities planned; read down each column for the necessary *elements* of each session. When you grasp the principles behind both the sequence and the various elements, you can easily adapt the model to your special needs in a variety of situations.

The elements in each session are listed as topics, aids, activities, and resource persons:

Topics: In general, the information to be

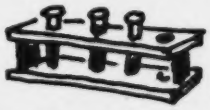
5	6	7	8	REUNION
Eating Out	Fats and Oils, Dairy Products	Fruits, Vegetables, Grains	Community Impact Plans for Follow-up	Reinforcement for Maintenance of New Eating Style
Weight control High blood pressure	Smoking			
Weigh; chart long-term goals; weight control booklets Restaurant menus Low calorie snacks (recipes) Food record, with attention to excess calories	UNIT 5 Food labels and cartons Heart Saver Rating Scale 3 Day Food Record Brand Names List	UNIT 6 Weigh; Chart long-term goals Nutrition information quiz (post-test) Collect 3 Day Record	Draw blood HSES booklet as permanent reference Participant evaluation	Blood cholesterol reports; individual counseling
Select acceptable choices from restaurant menus	Set up committee to plan final potluck dinner or dinner out	Committee report Discuss personal plans for change and how to reach out into community	Potluck dinner (or dinner out); role playing or skits Set reunion time Evaluation feedback on NIQ and 3 Day Food Records	Report back on community follow-up activities
MD on CHD risk factors with emphasis on hypertension	Smoking specialist or film	Community organizer or representative from health facility in community	Speaker from Heart Association Medical backup for blood tests	

covered follows the sequence of the slide-tape series, with optional additions such as weight control, high blood pressure and smoking. But because the goal of the program goes beyond the mastery of information to individual behavioral change and broad health education programs, time is also spent on the change process within the individual (third session), and in the community (last two sessions).

Participatory and visual aids: The slide-tape series and many other devices are used to involve as many participants' senses as possible. The general rule is, "Don't just say it; *do* it. And when possible, don't do it yourself, but *have participants do it!*"

Reading *across* the chart you will see that certain aids are used for feedback and evaluation, e.g., the Nutrition Information Quiz is given as a pre-test in Session 1, and as a post-test in Session 7, with feedback to individual participants in the final session.)

The Three-Day Food Record appears twice (Sessions 1 and 6) with evaluation and review following each use. Blood tests and weights are also taken in the beginning and end as very practical ways of encouraging and reinforcing change. For many, reduction of blood cholesterol count appears to serve as a direct incentive for continued change.



Activities designed to further group cohesion: These are present throughout the course to secure deeper and longer lasting personal commitment to change. Session 1 begins with extended personal introductions; later sessions involve participants in small group discussions and activities such as keeping three-day food records. Very often participants offer to bring food for tasting. In several sessions an almost party-like friendliness is created between group members by the serving of snacks and recommended foods. The final dinner (or dinner at a restaurant) is planned and executed by a committee of the participants themselves. In these ways, the Heart Saver program becomes not just a "class" but a group of friends, supportive of change.

Resource persons: People from the community are a vital part of this model. The number and qualifications of resource people used depend on your situation, and your own background and abilities. The following resource persons have proved to be very helpful:

- Nutritionist-educator (usually your role)
- Community co-leader (especially for ethnic groups, and also when follow-up community health education is planned)
- Physician and hospital or health center support:
  - (a) medical back-up for blood cholesterol tests (and other medical procedures such as blood pressure)
  - (b) doctors with expertise on the CHD risk factors who are willing to meet with participants in your setting and be available to answer questions freely. The doctors should be thoroughly acquainted with the Heart Saver recommendations and the reasons for them.
  - (c) Referral and followup procedures for medical attention to persons with elevated choles-

terol levels and elevated blood pressure.

In addition, when planning an integrated risk factor reduction program, the following resource persons are especially helpful:

- Psychologist (on psychology of eating habits and processes of change)
- Smoking specialist (on ways to stop smoking)
- Community organizer or person from the Heart Association heart attack prevention program (on strategies of broad change)

Keeping in mind the basic elements of the model and the principles guiding the sequence, programs can be designed to fit the special requirements of each different community. Such programs are needed more and more if we are to meet the needs of the poor and minority groups to whom the usual preventive health education programs are not available.

CHAPTER 7

ADAPTING THE PROGRAM FOR HOSPITAL AND INDUSTRIAL SETTINGS

There are several settings appropriate for the Heart Saver Program. Two of the most relevant and effective are the hospital and industry (the job setting).

Hospitals

Interest in good health and nutrition is natural for patients in the hospital. Hospital staff can become concerned about sound nutrition in the kinds of foods they provide to both employees and patients through the food service. The approach is two-pronged: (1) making changes in menus and food preparation within the hospital food service department, and (2) educating the patients and employees to good eating patterns outside the hospital setting.

Before proceeding with an educational program, it is essential to secure the cooperation of the administrative and medical staff. Your approach to these groups might include:

1. Getting them acquainted with the ICHD recommendations (and distributing the HSES booklet),
2. Suggesting a pilot program for a limited trial period,
3. Demonstrating that food costs need not increase with the change,
4. Indicating that the new menu plan can offer foods that are attractive and palatable. (Show Units 1 and 2 of the slide-tape series to reinforce this.)

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Changing the Food Service

A first step in changing the food service will involve that department in gathering records of daily food preparation and the number of persons served, purchasing records and specifications for purchasing, standardized recipes and portion size. This will enable them to evaluate the menu for fat and cholesterol and to make modifications designed to reduce the amount of saturated fat and cholesterol in the diet, and in some cases to reduce calories.

The recommendations will include increasing the frequency of serving fish, poultry, and acceptable meatless entrees, and using egg whites or egg substitutes in place of whole eggs in cooking. Methods of low-fat food preparation methods will be recommended, e.g., baking, broiling, rotissering and roasting on a rack. Use of polyunsaturated oils and margarine can further lower saturated fat intake. The *size* of meat portions may be limited. To insure consistency in meeting specifications in every phase of food service, a scheduled procedure for monitoring performance should be set up.

The changes made can be applied to regular and modified diets, and to the cafeteria food service. The changes should be noticeable but acceptable as substitutes for the items formerly on the menu, avoiding changes which are so restrictive that patients will reject the program in its entirety rather than learn about diet and heart disease.

Educating Patients and Staff

A series of four training sessions should be planned for food service personnel, using slide-tape Units 1 and 2 at the first session, and Units 3, 4, 5 and 6 at subsequent meetings. Discussion should focus on the actual modifications in preparation which they will be making as the hospital adopts the Heart Saver Eating Style. Similar sessions can be given for other departments, adapting the presentation to the needs of each group. Units 2 and 3 of the slide-tape series are most pertinent when time is limited.

Each department has a role in helping to motivate patients to change their eating patterns. For example, the public relations department could feature articles on diet and heart disease in the hospital publications for employees and patients. The packet of information which is given to new admissions could include a simple, well-illustrated brochure explaining why fat-modified menus are used, and how to get more information.

There are many ingenious ways to keep the new eating style in the consciousness of employees and patients. Reminders at the time of eating are especially effective. Decorative hearts and information brochures, table tents or place mats can be used for both patient trays and in the employees' cafeteria. The menu board and the patient menus should indicate which selections are acceptable for the Heart Saver Eating Style by using red letters, hearts or asterisks along with a brief explanation. The Volunteer Services can often be of great assistance in implementing some of these ideas.

Departments whose personnel are in direct contact with patients need to have the information necessary to answer patients' questions. The education of the hospital staff is a big undertaking, but without this step, the entire program could founder. Of primary

importance is the medical staff. Staff involved in patient education, particularly the nursing staff, should be included at an early stage.

Once the staff is educated, individual staff members will be ready to assist in the education of in- and out-patients. The dietitian may decide to meet with groups of patients, using the slide-tape units, or she may prefer to have them available for individual self-teaching, followed by counseling on particular problems and questions. Since the slide-tapes are self-contained, they may also be used in out-patient and visitor areas. The HSES booklet is an essential source for reference and follow-up in all situations.

Industry

Another important setting for preventive nutrition education is the work place—a location of prime significance to most people. The industrial nurse or medical director may be in a position to influence workers. The accessibility of workers to long-term follow-up means a potentially high rate of effectiveness.

In an experiment with a Chicago company, it was found that participants identified as high risk tended to be "high achievers" for the most part. Such people want a lot of concrete information in a short period of time. They follow through on suggestions with intense vigor. The slide-tape units are ideal for presenting information rapidly and clearly; and the various aids are especially well-suited for workers used to charting success in terms of tangible achievements.

The self-scoring and take-home materials are most useful in programs where participants spend only a small amount of time in a group session, and must be on their own in learning and maintaining new eating behaviors. As previously discussed, these aids which may be found in the Resource Book include: the Heart Saver Rating Scale, the Three-Day Food Record, the Food Pattern Questionnaire, all of which make participants aware of their eating habits. In addition the pre-test Nutrition Information Questionnaire helps the Guide assess participants' knowledge and attitudes and gear the curriculum to their needs. The identical post-test administered at the program's end helps reinforce knowledge gained, and assists in evaluating the program's effectiveness.

If time is limited, some slide-tape units may be omitted. One program in an industrial setting used Units 1 and 4 only; Unit 1 to convince participants of the need to change, and Unit 4 because the main dish appeared to the instructor to involve the most crucial changes to be tackled.

Industrial programs should attempt to combine courses on dietary change with those emphasizing other major CHD risk factors—high blood pressure and smoking—and stress the importance of regular physical exercise and medical examinations.

Other Settings

The possibilities of settings for preventive education are endless: schools, parent organizations, church groups, and public health centers. As private group practice for physicians grows and as the number and effectiveness of Health Maintenance Organizations (HMOs) increase, natural settings for group instruction in preventive nutrition education will become more available and will supplement the individual counseling of high risk patients which is the chief education approach at present.

By exploring all possible settings and approaches, the health professions can meet and take important steps towards the ICHD's challenge for change on a massive national scale.

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CHAPTER 8

EVALUATION

Evaluation should always be an integral part of any educational experience. For this *Handbook*, evaluation may be thought of in two distinct ways:

1. Evaluation of the amount of change achieved by individual participants or for a group of participants. This includes change in nutrition knowledge and eating behavior, as well as success in reduction of serum cholesterol and weight.
2. Evaluation of success in reaching program goals.

EVALUATION OF INDIVIDUAL OR GROUP CHANGE

Summative Testing

The Heart Saver materials include a 25-question test scored for 60 individual items, identified as the Nutrition Information Questionnaire. This test measures a participant's overall understanding of the Heart Saver Eating Style. The 25 questions (or 60 items) cover a representative sampling of the terms, facts and principles of the Heart Saver Program. A maximum score of 60 is possible on the test. A score of 50-60 (equivalent to 88-100% correct) is rated "excellent."

A preferred method for using the test is to administer it before and after the Program. This permits the instructor to determine just how much of any change in knowledge resulted from the course. Individuals should be given feedback on their results; areas of growth and change can be used to give the participant a sense of success and encourage him to continue working on the Heart Saver pattern. Areas of weakness should also be pointed out with suggestions for sections to review in the booklet or other materials. Occasionally it may be helpful to recommend viewing certain slide-tape units a second time. (The self-teaching units are helpful for this, since the participant can review them at his own pace or replay them more than once when desired.)

This pre- and post-testing is designed to make a general assessment of the degree to which the main cognitive objectives of the Heart Saver program have been achieved and is called *summative testing*—summing up the results over the entire course. A copy of the Nutrition Information Questionnaire together with additional suggestions for its use can be found in the Resource Book.

Feedback during the learning experience

Included in the Heart Saver package is another set of materials which provide feedback as the course proceeds. This includes brief quizzes to test understanding of individual segments of the content material. There are six such quizzes, one for each slide unit. There are also two behavior change feedback exercises used by the participant to indicate changes he feels are needed and that he is ready to make. These feedback observations, called *formative testing*, tell the instructor how well material in a given segment has been mastered and what goals are currently in view for each participant. This ongoing evaluation can be used to plan each subsequent session and can suggest changes in the curriculum to take into account progress made and the unique needs of the individual or group.

Measuring change in eating behavior

The goal of your program is adherence to the Heart Saver Eating Style. To evaluate this objective you need information on eating behavior at entry and conclusion of the program. Many methods of collecting such information are available. The Three-Day Food Record is one of the simplest and most effective. Results can be quantified and made into an evaluation measure.

Various ways of scoring dietary intake may be used. It is beyond the scope of this Handbook to discuss them in detail. In situations where nutrient data are hand calculated or computer tabulated, it is possible to determine total calories and all significant nutrient intake, including total fat, saturates, polyunsaturates and dietary cholesterol, and to rate adherence to the recommended dietary pattern directly. The amount of change can be estimated by comparison of initial pattern with intake at conclusion of the Heart Saver program and at various points thereafter.

The NEP has developed a simplified scoring system which predicts the cholesterol-lowing or raising effect of various food portions on an isocaloric diet. These data have been transformed to a numerical value which enables you and the participant to arrive at a total achievement score to assess the dietary adherence.

Change in serum cholesterol and weight

An average reduction of approximately ten per cent in serum cholesterol level is usually achieved when changing from the usual U.S. diet to the Heart Saver Eating Style. Both entry and final comparison values should be based on a mean of at least two cholesterol measurements when possible. This gives a more accurate estimate of an individual's "real" cholesterol level.

Achievement of steady weight loss or avoidance of weight gain may be included in evaluation of an individual's success in changing to the new pattern.

PROGRAM EVALUATION

An effective program will have clearly achievable objectives about such matters as:

1. **Number of participants from the identified target group,**
2. **Regularity of attendance,**
3. **Group cohesiveness and support as determined by the tone of group discussions, the kind of initiative and cooperation displayed in planning the final sessions, and the seriousness of plans for follow-up and reunion.**

These items represent objective data about your program, which can be supplemented with subjective data from participants and resource people involved. You may choose to prepare a brief evaluation questionnaire asking participants to specify the most helpful devices for inducing change, and indicating aspects of the program which could be improved when the program is offered again. A short evaluation session toward the end may also elicit helpful suggestions for future use.

In conclusion, we encourage the users of these materials to complete a brief evaluation form so that there can be continuous feedback on the experiences in the use of this program. This will assist you in assessing your own program and make your work a vital part of the comprehensive national effort to prevent heart disease.

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